Attorney's Docket No.: 06497-013002

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

James C. Liao

Art Unit : 1652

Serial No.: 10/048,186

: June 19, 2002

Examiner: Unknown

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Filed Title

: ENGINEERING OF METABOLIC CONTROL

MAY 2 2 2003

Commissioner for Patents

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## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449, copies of which are enclosed.

This statement is being filed before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

5-16-03 Date:

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MAY 19 2003 Department of Commerce Patent and Trademark Office No. 06497-013002 No. 064

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	BA						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes No	
	BB							

(	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Desig. ID	Document			
	ВС	Alex and Simon, "Protein histidine kinases and signal transduction in prokaryotes and eukaryotes", Trends in Genetics 10(4):133-138 (1994)			
	BD	Aristidou et al., "Metabolic engineering of <i>Escherichia coli</i> to enhance recombinant protein production through acetate reduction", <i>Biotechnol. Prog.</i> 11:475-478 (1995)			
	BE	Bauer et al., "Improved expression of human interleukin-2 in high-cell-density fermentor cultures of <i>Escherichia coli</i> K-12 by a phosphotransacetylase mutant", <i>Appl Environ Microbiol</i> . 56(5):1296-1302 (1990)			
	BF	DeWitt et al., This Month in Nature Biotechnology, Nature Biotechnology 18:480 (2000)			
	BG	Diez-Gonzalez and Russell, "The ability of <i>Escherichia coli</i> O157:H7 to decrease its intracellular pH and resist the toxicity of acetic acid", <i>Microbiology</i> 143:1175-1180 (1997)			
	ВН	Farmer and Liao, "Improving lycopene production in <i>Escherichia coli by</i> engineering metabolic control," <i>Nature Biotechnol</i> . 18:533-537 (2000)			
	BI	Hakenbeck and Stock, "Analysis of Two-Component Signal Transduction Systems Involved in Transcriptional Regulation", <i>Methods in Enzymology</i> 273:281-301 (1996)			
	ВЈ	Parkinson and Kofoid, "Communication Modules in Baterial Signaling Proteins", Annu. Rev. Genet. 26:71-112 (1992)			
	ВК	Sevenich et al., "DNA binding and oligomerization of NtrC studied by fluorescence anisotropy and fluorescence correlation spectroscopy", <i>Nucleic Acid Res.</i> 26(6):1373-1381 (1998)			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not	tin conformance and not considered. Include convert this form with

next communication to applicant.